



OFFICE OF ENVIRONMENTAL SERVICES

PROPOSED Minor Source Air General Permit

Crude Oil and Natural Gas Production

AGENCY INTEREST NO. 158873

ACTIVITY NO. PER20080001

In accordance with the Louisiana Environmental Quality Act, as amended (La. R.S. 30:2001, *et seq.*: “the Act”) and the rules and regulations effective or promulgated under the authority of the Act (LAC 33:III.501 and LAC 33:III.513), this Air General Permit is issued. This permit authorizes persons who meet the requirements set forth herein and have been approved by this Office to construct, operate, and modify crude oil and natural gas production facilities in accordance with the emissions limitations, monitoring requirements, and other conditions of this permit.

This permit shall become effective on

This permit shall expire ten (10) years from the effective date of the permit.

Issued on

Cheryl Sonnier Nolan
Assistant Secretary

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
MINOR SOURCE AIR GENERAL PERMIT
PROPOSED GENERAL PERMIT FOR CRUDE OIL AND NATURAL GAS PRODUCTION

The LDEQ, Office of Environmental Services, is accepting written comments on the master minor source air general permit for Crude Oil and Natural Gas Production. In accordance with LAC 33:III.513.A, LDEQ may issue a general permit intended to cover numerous similar sources or activities.

This general permit will authorize construction, operation, and modification of crude oil and natural gas production facilities that meet established eligibility requirements. Source categories eligible for coverage under this general permit include:

- crude oil and natural gas production and field facilities classified under Standard Industrial Classification (SIC) Code 1311—Crude Petroleum and Natural Gas; and
- “midstream” facilities, contracted facilities which generally compress and/or process natural gas between the producing property and a natural gas processing plant or sales gas pipeline compressor station. Midstream facilities may be classified under SIC Code 1389—Oil and Gas Field Services, Not Elsewhere Classified.

This general permit does not address operations engaged in the transmission and/or storage of natural gas under SIC Code 4922—Natural Gas Transmission, or those engaged in the processing of natural gas under SIC Code 1321—Natural Gas Liquids, unless a facility is classified as such only by its use of Joule-Thomson equipment as part of a “forced” process to extract natural gas liquids. Further, this general permit cannot be used to authorize emissions at:

1. “part 70 Sources” as defined in LAC 33:III.502;
2. except as described in LAC 33:III.501.B.3.a-b, facilities subject to regulatory requirements not addressed by this general permit, including those with equipment specifically excluded as described in the section of the general permit entitled “Equipment Specifications and Calculation Methodologies”;
3. facilities subject to LAC 33:III.Chapter 59—Chemical Accident Prevention or 40 CFR Part 68—Chemical Accident Prevention Provisions;
4. facilities that formerly operated as major sources if Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) controls were installed and are being maintained on existing emissions units; and
5. facilities located in Calcasieu or Pointe Coupee Parish with equipment subject to the control requirements of LAC 33:III.2115.

A technical review of the working draft of the proposed permit was submitted to the Louisiana Chemical Association (LCA), Louisiana Mid-Continent Oil and Gas Association (LMOGA), Kean Miller, and HLP Engineering. Any remarks received during the technical review will be addressed in the “Worksheet for technical Review of Working Draft of Proposed Permit.” All remarks received by LDEQ are included in the record that is available for public review.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Tuesday, January 5, 2010.** Written comments will be considered prior to a final permit

decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The proposed minor source air general permit and statement of basis are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

Additional copies may be reviewed at the Parish Library Headquarters in each parish of the state. The material can also be viewed at the Calcasieu Parish Library, Sulphur Regional Branch, 1160 Cypress Street, Sulphur, LA 70663-5111 and the Morgan City Public Library, 220 Everett Street, Morgan City, LA 70380.

Inquiries or requests for additional information regarding this permit action should be directed to Bryan D. Johnston, LDEQ, Air Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3001.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmailistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the proposed permit and statement of basis can be viewed at the LDEQ permits public notice webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at http://www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm.

All correspondence should specify AI Number 158873, Permit Number Minor Source Air General Permit for Crude Oil and Natural Gas Production, and Activity Number PER20080001.

Scheduled Production Date: November 25, 2009

**MINOR SOURCE AIR GENERAL PERMIT
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CRUDE OIL AND NATURAL GAS PRODUCTION

I. STATEMENT OF AUTHORITY – LAC 33:III.513.A

1. The permitting authority may issue a general permit intended to cover numerous similar sources or activities. General permits shall be issued in accordance with LAC 33:III.519 and, prior to issuance, shall undergo public notice. Each general permit shall incorporate terms and conditions applicable to sources that would qualify for the general permit. Any general permit shall identify criteria by which sources may qualify for the general permit, and may provide for applications which deviate from the requirements of LAC 33:III.517.
2. The owner or operator of any source that would qualify for the general permit may apply for authorization to operate under the general permit. The application must include all information necessary to determine qualification for and to assure compliance with the general permit.
3. The permitting authority may approve an owner or operator's application for authorization to operate under the general permit without repeating the public participation procedures. Such an approval shall not be a final permit action for purposes of judicial review regarding the terms and conditions of the general permit.
4. Any source which is issued the general permit shall, notwithstanding a permit shield, be subject to enforcement action for operation without a permit if the source is later determined not to qualify for the general permit.

II. ELIGIBILITY

This minor source air general permit authorizes construction, operation, and modification of crude oil and natural gas production facilities that meet the eligibility requirements outlined herein.

Facilities eligible for coverage under this general permit include:

- crude oil and natural gas production and field facilities classified under Standard Industrial Classification (SIC) Code 1311—Crude Petroleum and Natural Gas (North American Industry Classification System (NAICS) 211111); and
- “midstream” facilities, contracted facilities which generally compress and/or process natural gas between the producing property and a natural gas processing plant or sales gas pipeline compressor station. Midstream facilities may be classified under SIC Code 1389—Oil and Gas Field Services, Not Elsewhere Classified (NAICS 213112).

This general permit does not address operations engaged in the transmission and/or storage of natural gas under SIC Code 4922—Natural Gas Transmission (NAICS 486210), or those engaged in the processing of natural gas under SIC Code 1321—Natural Gas Liquids (NAICS 211112), unless a facility is classified as such only by its use of Joule-Thomson (J-T) equipment as part of a “forced” process to extract natural gas liquids (NGL). See Section V of this general permit for more information.

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Facilities must maintain eligibility to operate under this permit. This permit does **not** authorize operations that are not compliant with the established eligibility conditions. Prior to initiating any modification to the facility that would prohibit it from being covered under this general permit, the permittee must request an "individual" site-specific air permit. If a modification rendering the facility ineligible for this general permit is effected without a site-specific permit in place, the modification will be deemed unauthorized from the date construction commenced and subject to enforcement action.

Facilities Excluded from Coverage

This general permit cannot be used to authorize emissions at:

1. "Part 70 Sources" as defined in LAC 33:III.502.
2. Except as described in LAC 33:III.501.B.3.a-b, facilities subject to regulatory requirements not addressed by this general permit, including those with equipment specifically excluded as described in Section V – Equipment Specifications and Calculation Methodologies.
3. Facilities subject to LAC 33:III.Chapter 59–Chemical Accident Prevention or 40 CFR Part 68–Chemical Accident Prevention Provisions.
4. Facilities that formerly operated as major sources if Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) controls were installed and are being maintained on an existing emissions unit.
5. Facilities located in Calcasieu or Pointe Coupee Parish with equipment subject to the control requirements of LAC 33:III.2115.

III. FACILITY-WIDE EMISSIONS LIMITATIONS

Baton Rouge Nonattainment Area

For facilities located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, potential emissions of criteria pollutants and toxic air pollutants (TAP) from the facility (or grouping of contiguous facilities) must be less than the following amounts, in tons per year:

<u>Pollutant</u>	<u>Emissions</u>
PM ₁₀	15
SO ₂	40
NO _x	20
CO	90
Total VOC	20
Total TAPs	20
Any Individual TAP	8

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Other Parishes

Except for facilities located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, potential emissions of criteria pollutants and toxic air pollutants (TAP) from the facility (or grouping of contiguous facilities) must be less than the following amounts, in tons per year:

<u>Pollutant</u>	<u>Emissions</u>
PM ₁₀	15
SO ₂	40
NO _x	90
CO	90
Total VOC	90
Total TAPs	20
Any Individual TAP	8

The above limitations shall include aggregate emissions from *all* sources at the facility, including emissions from all insignificant activities set forth under LAC 33:III.501.B.5, those from activities traditionally classified under General Condition XVII (e.g., sampling), and those from activities that may occur at the facility on an infrequent basis, such as pigging operations at a "midstream" facility.

Re-designation of an Attainment Area to a Nonattainment Area

If, during the term of this permit, any parish outside of the Baton Rouge Nonattainment Area is designated as a "serious" or "severe" ozone nonattainment area, the owner or operator of a facility located in any such parish:

1. may retain this permit and comply with the limits applicable to facilities located in the Baton Rouge Nonattainment Area; or
2. if the facility cannot comply or the owner or operator chooses not to comply with limits applicable to facilities located in the Baton Rouge Nonattainment Area, the owner or operator shall apply for an "individual" site-specific air permit no later than 90 days after the effective date of the "serious" or "severe" nonattainment designation.

IV. CONTIGUITY

Conglomerations of contiguous oil and gas sites (groups of facilities under common control separated by 0.25 miles or less) may be covered under this general permit provided that aggregate emissions from the contiguous facilities do not exceed the emissions thresholds listed in Section III. Guidance on evaluating contiguous facilities can be accessed on LDEQ's website at <http://www.deq.louisiana.gov/portal/tabcid/2347/Default.aspx>.

A separate application should be submitted for each facility in a contiguous grouping. It is not necessary for each facility in a contiguous grouping to seek coverage under this permit.

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V. EQUIPMENT SPECIFICATIONS AND CALCULATION METHODOLOGIES

Terms used in Section V are defined in the Statement of Basis (SOB) accompanying this permit.

A. Joule-Thomson (J-T) Equipment and Fugitive Emissions

Facilities using J-T equipment as part of a "forced" process are eligible for coverage under this general permit, provided:

1. the operation is a non-fractionating plant that does not have the design capacity to process 10 million standard cubic feet per day;
2. if the facility commenced construction, reconstruction, or modification after January 20, 1984, the owner or operator complies with all applicable requirements of 40 CFR 60 Subpart KKK—Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants; and
3. where Subpart KKK is applicable, the owner does not comply by routing emissions to a control device.

Forced extraction processes include Cryogenic-Joule-Thomson, Refrigerated Absorption and Cryogenic-Joule-Thomson, Refrigeration and Cryogenic-Joule-Thomson, Cryogenic-Joule-Thomson and Expander, and similar processes.

J-T equipment that relies on existing gas pressure and temperature and that does not require additional gas compression to remove condensates from the gas stream or to move hydrocarbon liquids or remaining gas from the process is also allowed. This process does *not* trigger any requirements under 40 CFR 60 Subpart KKK.

B. Amine Sweetening Units

Amine sweetening units eligible to be covered under this permit must have a design capacity less than 2 long tons per day (LT/D) of H₂S expressed as sulfur. Amine sweetening units primarily used to remove CO₂ from a produced gas stream are eligible for coverage under this general permit.

C. Marine Loading Operations

Marine loading operations eligible to be covered under this permit must not employ a control device to restrict VOC emissions from marine loading for purposes of compliance with LAC 33:III.2108.

D. Glycol Dehydration Units

Emissions from the gas-condensate-glycol (GCG) separator (flash tank) on all glycol dehydration units shall be controlled via a combustion device or by recycle/recompression.

For triethylene glycol (TEG) dehydration units:

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- the actual annual average flowrate of natural gas to the glycol dehydration unit shall be less than 85 thousand standard cubic meters [~ 3 MM scf] per day as determined by the procedures specified in 40 CFR 63.772(b)(1); or
- the actual average emissions of benzene from the glycol dehydration unit process vent (the glycol dehydration unit reboiler vent *and* the vent from the GCG separator (flash tank), if present) to the atmosphere shall be less than 0.90 megagram per year [~ 1 TPY] as determined by the procedures specified in 40 CFR 63.772(b)(2).

The following condition applies to any glycol dehydration unit for which construction commenced *after* the effective date of this general permit:

- Site-Specific Wet Gas Analysis: No later than 180 days after operations commence, the owner or operator shall recalculate emissions from the glycol dehydration unit using a site-specific wet gas analysis from a sample collected upstream of the dehydration system. Samples may be collected from the glycol contact tower, provided that the sampling point is prior to the contact of gas with the glycol. These records shall be retained on site or at another approved location and made available for inspection by the Office of Environmental Compliance, Surveillance Division. If emissions are in excess of previous estimates, the owner or operator shall follow the appropriate procedures described in General Condition III in Section XIII.

E. Internal Combustion Engines (ICEs)

ICEs must be fueled by natural gas or diesel (or fuel oil no. 2). Engines fueled by gasoline or liquefied petroleum gas (LPG) are not eligible for coverage under this permit.

ICEs subject to LAC 33:III.2201 are eligible for coverage under this permit provided that a chemical reagent (e.g., ammonia) is **not** used for the reduction of NO_x and the facility does **not** comply with Chapter 22 by means of a ton per day or pound per hour cap as allowed by §2201.D.4 or a facility-wide averaging plan as described in §2201.E.1.

F. Storage Vessels

Except as noted below, each storage vessel located *prior to* lease custody transfer containing any material *other than* crude oil, condensate, or produced water shall have a capacity less than or equal to 19,800 gallons; each vessel storing crude oil, condensate, or produced water shall have a capacity less than or equal to 420,000 gallons.

Except as noted below, each storage vessel located *after* lease custody transfer shall have a capacity less than or equal to 19,800 gallons.

Storage vessels storing a liquid with a *maximum true vapor pressure* less than 0.5 psia are eligible for coverage under this general permit.

For more information on lease custody transfer, see <http://www.deq.louisiana.gov/portal/tabid/2347/Default.aspx>.

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G. Flash Gas Emissions

Acceptable flash gas calculation methods are outlined by the Office of Environmental Assessment, Air Quality Assessment Division at <http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2291>.

For purposes of this permit, the alternative calculation methods described on the above webpage are acceptable for 1.) new fields or facilities not yet in production for which testing cannot be performed; and 2.) existing vessels that do not meet the definition of "storage vessel with the potential for flash emissions." Calculations should be performed so as to represent the "worst case" (i.e., highest emissions) scenario.

VI. REQUESTING COVERAGE UNDER THIS GENERAL PERMIT

In order to request coverage under this general permit, an applicant should submit a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources," a completed "General Permit Applicability Questionnaire," and the appropriate new permit application fee to the Air Permits Division. The application forms and instructions are available on LDEQ's website at <http://www.deq.louisiana.gov/portal/tabid/2758/Default.aspx>.

An application to modify a site-specific air permit may also be used to request coverage under this general permit, provided that the "General Permit Applicability Questionnaire" accompanies the application.

Where facility-wide potential emissions of the following pollutants are less than or equal to the thresholds set forth in the table below, an applicant is authorized to construct and operate under the terms and conditions of this permit fourteen (14) days after the date the application is either postmarked or hand-delivered or upon notification by LDEQ that coverage has been extended, whichever is earlier.

<u>Pollutant</u>	<u>Emissions (TPY)</u>
acrolein	2.1
benzene	1.7
formaldehyde	3.0

Authorization to construct and operate is not automatically granted if the application is materially incomplete (e.g., required information omitted, application unsigned, etc.); if the facility in question is not eligible for coverage under this permit; or if the applicant is specifically notified of this fact by LDEQ.

Permit Application Fees

Fee number 0040 shall apply except as follows:

1. For those facilities employing J-T equipment as part of a "forced" process as described in Section V.A of this general permit, fee number 0050 shall apply.

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2. Fees for "midstream" facilities classified under SIC Code 1389 shall be as follows:

- If total facility-wide horsepower¹ is less than 5000, fee number 1710 shall apply, and the fee shall be calculated in accordance with the table below.

Fee Number	Description	Annual Maintenance Fee	New Permit Application	Modified Permit Fees	
				Major	Minor
1710	Negotiated Fee – State Permit	200.00	1000.00	600.00	200.00

- If total facility-wide horsepower equals or exceeds 5000, fee number 1460 shall apply. It is presumed that if facility-wide horsepower exceeds 20,000, the facility will not qualify for this general permit.

Fee Number	Description	Annual Maintenance Fee	New Permit Application	Modified Permit Fees	
				Major	Minor
1460	Recip. Nat Gas Comp Per 100 H.P.: C) 5,000 to 20,000 H.P.	45.38	226.92	136.12	45.38

VII. MODIFYING A FACILITY OPERATING UNDER THIS GENERAL PERMIT

As described in Section II, this general permit authorizes modification of crude oil and natural gas production facilities.

A. Modifications: Situations Where Pre-Construction Approval Is Not Required

Where facility-wide potential emissions of the following pollutants (including the planned modifications) are less than or equal to the thresholds set forth in the table below, the owner or operator may modify the facility without prior approval of LDEQ, provided that the facility remains compliant with the established eligibility conditions.

Pollutant	Emissions (TPY)
acrolein	2.1
benzene	1.7
formaldehyde	3.0

Notwithstanding facility-wide potential emissions of the aforementioned pollutants, modifications which do not increase hourly or annual potential emissions of said pollutants may also be effected without prior approval of LDEQ.

¹ In determining facility-wide horsepower, exclude emergency generators and "back-up" units that can't be operated simultaneously with a primary unit.

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Except as specified in Subsections VII.C and VII.D, within ten (10) calendar days after effecting any modification (generally commencement of construction) to a facility authorized to operate under this general permit, the permittee shall submit a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" and the appropriate modified permit fee to the Air Permits Division.

The completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" need only address the modifications effected at the facility.

B. Modifications: Situations Where Pre-Construction Approval Is Required

Except as specified in Subsections VII.C or VII.D, **prior to** effecting any modification (generally commencement of construction) *not* described in Section VII.A, the permittee shall submit a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" and the appropriate modified permit fee to the Air Permits Division. The modification shall not be effected until approved by LDEQ.

The completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" need only address the proposed modifications.

C. Special Provisions for Certain Equipment Types

Notwithstanding Subsection VII.B, addition or replacement of line heaters, heater treaters that do not represent a source of flash gas emissions, pneumatic pumps, pneumatic valves, pneumatic controllers, and fugitive components shall not require submittal of a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" to LDEQ, provided:

1. such modifications are disclosed in the next "Application for Approval of Emissions of Air Pollutants from Minor Sources" submitted pursuant to Subsection VII.A or VII.B;
2. the facility remains compliant with the established eligibility conditions; and
3. except as specified below, records of such modifications are retained on site or at another approved location for a minimum of two (2) years and made available for inspection by the Office of Environmental Compliance, Surveillance Division.

Records of the addition or replacement of pneumatic valves, pneumatic controllers, and fugitive components shall not be required.

D. "In Kind" Replacement of Equipment

Notwithstanding Subsections VII.A and VII.B, replacement of an existing emissions unit not identified in Subsection VII.C with an "in-kind" unit shall not require submittal of a completed "Application for Approval of Emissions of Air Pollutants from Minor Sources" to LDEQ, provided:

1. does not result in an increase in hourly or annual potential emissions of a regulated pollutant;

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2. is not subject to federal or state regulations not applicable to the replaced emissions unit;
3. is an identical or functionally equivalent unit. A “functionally equivalent unit” means a component that serves the same purpose as the replaced component;
4. the replaced emissions unit is permanently removed from the facility or otherwise permanently disabled;
5. such modifications are disclosed in the next “Application for Approval of Emissions of Air Pollutants from Minor Sources” submitted pursuant to Subsection VII.A or VII.B; and
6. records of such modifications are retained on site or at another approved location for a minimum of two (2) years and made available for inspection by the Office of Environmental Compliance, Surveillance Division.

VIII. REQUESTING TERMINATION OF COVERAGE UNDER THIS PERMIT

The permittee shall notify the Air Permits Division using the “Application for Approval of Miscellaneous Permitting Actions” if operations at the facility permanently cease during the permit term. The application form and instructions are available on LDEQ’s website at <http://www.deq.louisiana.gov/portal/tqid/2758/Default.aspx>.

If, in accordance with Section II, the permittee seeks permission to effect a modification rendering the facility ineligible for coverage under this general permit, it is not necessary to request termination of this general permit once a site-specific permit is obtained.

IX. NAME/OWNER/OPERATOR CHANGES

In the event of a name, owner, or operator change, the permittee shall notify the Office of Environmental Services in accordance with LAC 33:I.Chapter 19 using the “Facility Name Change and Change of Ownership Form” (NOC-1). The form and instructions are available on LDEQ’s website at <http://www.deq.louisiana.gov/portal/tqid/65/Default.aspx>.

In accordance with LAC 33:I.1903.A, the previous owner retains responsibility for compliance with all permit terms and conditions until the permit has been transferred.

X. EMISSIONS INVENTORY

Notwithstanding the applicability provisions of LAC 33:III.919, the owner or operator of a facility located in one of the following parishes shall submit an annual Emissions Inventory (EI) as described in LAC 33:III.919 by the date set forth in the rule or as otherwise specified by LDEQ.

Ascension	Iberia	St. Helena	Tangipahoa
Assumption	Iberville	St. James	West Feliciana
East Baton Rouge	Livingston	St. John the Baptist	West Baton Rouge
East Feliciana	Pointe Coupee	St. Martin	

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Re-designation of an Attainment Area to a Nonattainment Area

Notwithstanding the applicability provisions of LAC 33:III.919, if, during the term of this permit, any parish outside of the Baton Rouge Nonattainment Area is designated as an ozone nonattainment area, the owner or operator of a facility located in any such parish, or in any parish that adjoins such parish, shall submit an annual EI as described in LAC 33:III.919. In this event, the initial EI will be due in the year following the first *full* year of re-designation. For example, if a parish is designated as an ozone nonattainment area in August 2011, the initial EI shall be submitted in 2013 and disclose actual emissions during calendar year 2012.

Re-designation of a Nonattainment Area to an Attainment Area

If, during the term of this permit, any parish is re-designated as an ozone attainment area or otherwise ceases to adjoin an ozone nonattainment area, the need to submit an annual EI shall be dictated by LAC 33:III.919.

XI. LABORATORY ANALYSES

Laboratory procedures and analyses performed by commercial laboratories shall be conducted in accordance with the requirements set forth under the Laboratory Accreditation procedures established by LAC 33:I.Chapters 45-59. LDEQ will not accept data generated by commercial laboratories that are not accredited under this program for acceptable analytical methods to determine speciated analytes, and retesting will be required by an accredited laboratory. Information on the Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation is available on the LDEQ's website at <http://www.deq.louisiana.gov/portal/tabcid/2412/Default.aspx>.

XII. GENERAL COVERAGE

Continuation of an Expired General Permit

If this permit is not reissued or replaced prior to the expiration date, it shall be administratively continued and remain in force and effect for permittees that were covered prior to its expiration. Any permittee who was granted coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

1. reissuance or replacement of this permit, at which time the permittee must comply with the requirements for obtaining coverage under the new permit;
2. issuance of a site-specific permit to the facility; or
3. a formal permit decision by LDEQ not to reissue this general permit, at which time the permittee must seek coverage under a site-specific permit. In any such notice not to reissue the general permit, LDEQ will establish a deadline for the submittal of an application for a site-specific permit. LDEQ may grant additional time to submit the application upon request of the applicant. Coverage under this general

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permit shall continue until such time as a site-specific permit is approved. If a permittee fails to submit in a timely manner a site-specific air permit application as required by LDEQ, then the applicability of this permit to the individual permittee will be automatically terminated at the end of the day specified by LDEQ for application submittal.

Requirement for a Site-Specific Permit

Eligibility for this permit does not confer a vested right to coverage under the permit. LDEQ may require any person authorized by this permit to apply for and/or obtain a site-specific air permit. If LDEQ requires a permittee authorized to emit under this permit to apply for a site-specific air permit, LDEQ will notify the permittee in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision, a statement setting a deadline for the permittee to file the application, and a statement that on the effective date of issuance or denial of the site-specific air permit, coverage under this permit will automatically terminate. LDEQ may grant additional time to submit the application upon request of the applicant. If a permittee fails to submit in a timely manner a site-specific air permit application as required by LDEQ, then the applicability of this permit to the individual permittee will be automatically terminated at the end of the day specified by LDEQ for application submittal.

LDEQ's notification that coverage under a site-specific permit is required does not imply that the facility does not meet the eligibility requirements of this permit.

Severability

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

Reopener Clause

This permit may be modified, revoked and reissued, or terminated for cause. Upon modification or reissuance of this permit, the permittee shall comply with any new or modified requirements by any compliance dates established in the modified or reissued permit.

If there is evidence indicating that the air emissions authorized by this permit cause or have the reasonable potential to cause or contribute to a violation of a NAAQS, the facility may be required to obtain a site-specific permit or this permit may be modified to include different limitations and/or requirements.

**MINOR SOURCE AIR GENERAL PERMIT
AGENCY INTEREST NO. 158873
ACTIVITY NO. PER20080001**

CRUDE OIL AND NATURAL GAS PRODUCTION

XIII. GENERAL CONDITIONS

The following general conditions from LAC 33:III.537 apply, except as modified below.

General Condition	Applicable	Comments
I.	Yes.	Maximum facility-wide emissions authorized by this general permit are set forth in Section III of the permit. Site-specific emissions limitations are established by the permittee's application requesting coverage under this general permit. Exceedances of any limitations defined therein are addressed in General Condition III.
II.	Yes.	
III.	Yes.	This permit does not contain sections entitled "Emission Rates for Criteria Pollutants" and "Emission Rates for TAP/HAP and Other Pollutants." If emissions from an emissions unit are subsequently determined to be greater than those disclosed in a permit application, but facility-wide emissions remain within the limits set forth in Section III of this general permit, the owner or operator shall submit a revised application in accordance with Section VII of this general permit as soon as practicable, but no later than 30 calendar days after discovery of the discrepancy. In such situations, the owner or operator is not required to submit a report pursuant to General Condition XI unless an underlying federal or state standard has been violated. If a facility-wide emission limitation has been exceeded, a report must be submitted pursuant to General Condition XI.
IV.	Yes.	
V.	No.	
VI.	Yes.	
VII.	Yes.	
VIII.	No.	Testing and reporting deadlines are established by the Specific Requirements of this permit.
IX.	No.	See Section VII of this general permit and General Condition III.
X.	Yes.	
XI.	Yes.	See comment associated with General Condition III.
XII.	Yes.	
XIII.	Yes.	
XIV.	Yes.	
XV.	No.	
XVI.	Yes.	See Section IX of this general permit.
XVII.	Yes.	Only General Condition XVII activities disclosed in the permit application are considered authorized discharges.

MINOR SOURCE AIR GENERAL PERMIT
AGENCY INTEREST NO. 158873
ACTIVITY NO. PER20080001

CRUDE OIL AND NATURAL GAS PRODUCTION

General Condition	Applicable	Comments
XVIII.	See comment.	General Condition XVIII applies to the master general permit itself, but does extend to the action of granting coverage under this general permit. According to LAC 33:III.513.A.3, LDEQ may "approve an owner or operator's application for authorization to operate under the general permit without repeating the public participation procedures. Such an approval shall not be a final permit action for purposes of judicial review regarding the terms and conditions of the general permit."
XIX.	No.	
XX.	Yes.	

In addition, the following additional general conditions apply:

- XXI. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- XXII. No person shall knowingly falsify, tamper with, or render inaccurate, any monitoring device or method required to be maintained under this permit.
- XXIII. The permittee must take all reasonable steps to minimize or prevent any emissions in violation of this permit which have a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying emissions.
- XXIV. The permittee shall furnish to the Department, within a reasonable time to be specified by the Department of not less than 30 days, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this standard permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.
- XXV. Nothing in this permit will be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable federal or state law or regulation. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

**MINOR SOURCE AIR GENERAL PERMIT
AGENCY INTEREST NO. 158873
ACTIVITY NO. PER20080001**

CRUDE OIL AND NATURAL GAS PRODUCTION

XIV. PUBLIC NOTICE

Request for public comment on this Minor Source Air General Permit for Crude Oil and Natural Gas Production was published in *The Advocate*, Baton Rouge; *The Times-Picayune*, New Orleans; *The News-Star*, Monroe; *The Lake Charles American Press*, Lake Charles; *The Times of Shreveport*, Shreveport; *The Advertiser*, Lafayette; the *Town Talk of Alexandria*, Alexandria; and in *The Courier of Houma*, Houma on <date>, 2009. All comments will be considered prior to a final permit decision.

As specified in LAC 33:III.513.A.3, the permitting authority may approve an owner or operator's application for authorization to operate under the general permit without repeating the public participation procedures.

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities
Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial

Group: PCS 0003 Amine Sweetening Units

Group Members: EQT 0008 EQT 0013

EQT 0008 - Amine Sweetening Units - Regenerator Vents

To certify that a facility is exempt from the control requirements of these standards, each owner or operator of a facility with a design capacity less than 2 L/T/D of H₂S in the acid gas (expressed as sulfur) shall keep, for the life of the facility, an analysis demonstrating that the facility's design capacity is less than 2 L/T/D of H₂S expressed as sulfur. [40 CFR 60.647(c)]

2 [LAC 33:III.1513.C]

3 [LAC 33:III.2115.K]

Record and retain at the site sufficient data to show annual potential sulfur dioxide emissions.

Facilities located in Pointe Coupee or Calcasieu Parish: Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality upon request. This requirement shall be applicable even if potential VOC emissions are less than 50 tons per year.

EQT 0013 - Amine Reboilers

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

Group: PCS 0006 Diesel Internal Combustion Engines

Group Members: EQT 0002 EQT 0017 EQT 0019 EQT 0025

EQT 0002 - Diesel ICEs - Engines Subject to NSPS III

Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and < 11 HP: Carbon monoxide <= 6.0 g/BHP-hr (8.0 g/KW-hr). Subpart III.

[40 CFR 60.4204(a)]

Which Months: All Year Statistical Basis: None specified

Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and >= 175 HP: Total hydrocarbon <= 1.0 g/BHP-hr (1.3 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]

Which Months: All Year Statistical Basis: None specified

Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and >= 175 HP: Particulate matter (10 microns or less) <= 0.40 g/BHP-hr (0.54 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]

Which Months: All Year Statistical Basis: None specified

Pre-2007 year Models, Non-Emergency Use, >= 10 L/cylinder < 30 L/cylinder, and Max Test Speed < 130 RPM: Nitrogen oxides <= 12.7 g/BHP-hr (17.0 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]

Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS**AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities**

Activity Number: PER2008001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial**Group: PCS 0006 Diesel Internal Combustion Engines****EQT 0002 - Diesel ICEs - Engines Subject to NSPS III**

- 10 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, >= 10 L/cylinder < 30 L/cylinder, and Max Test Speed >= 2000 RPM: Nitrogen oxides <= 7.3 g/BHP-hr (9.8 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 11 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and >= 11 HP < 25 HP: Carbon monoxide <= 4.9 g/BHP-hr (6.6 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 12 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and < 11 HP: Particulate matter (10 microns or less) <= 0.75 g/BHP-hr (1.0 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 13 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and >= 25 HP < 50 HP: Carbon monoxide <= 4.1 g/BHP-hr (5.5 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 14 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and >= 175 HP: Carbon monoxide <= 8.5 g/BHP-hr (11.4 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 15 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and >= 11 HP < 50 HP: Non-methane hydrocarbons plus Nitrogen oxides <= 7.1 g/BHP-hr (9.5 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 16 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and >= 11 HP < 50 HP: Nitrogen oxides <= 6.9 g/BHP-hr (9.2 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 17 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, >= 10 L/cylinder < 30 L/cylinder, and Max Test Speed >= 130 RPM < 2000 RPM: Nitrogen oxides <= $33.6 \times N^{2/20}$ g/BHP-hr ($45.0 \times N^{2/20}$ g/KW-hr), where N is the appropriate maximum test speed in RPM. Note: Round speed-dependent standards to the nearest 0.1 g/BHP-hr. Subpart III. [40 CFR 60.4204(a)]
Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and < 11 HP: Non-methane hydrocarbons plus Nitrogen oxides <= 7.8 g/BHP-hr (10.5 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 18 [40 CFR 60.4204(a)] Pre-2007 year Models, Non-Emergency Use, < 10 L/cylinder, and >= 11 HP: Particulate matter (10 microns or less) <= 0.60 g/BHP-hr (0.80 g/KW-hr). Subpart III. [40 CFR 60.4204(a)]
Which Months: All Year Statistical Basis: None Specified
- 19 [40 CFR 60.4204(a)] >= 2007 year Models, Non-Emergency Use, and < 30 L/cylinder: Comply with the emission standards for new CI engines in 40 CFR 60.4201, as applicable. Subpart III. [40 CFR 60.4204(b)]
All Models, Non-Emergency Use, and >= 30 L/cylinder (Option 2): Nitrogen oxides <= 1.2 g/BHP-hr (1.6 g/KW-hr). Subpart III. [40 CFR 60.4204(c)(1)]
Which Months: All Year Statistical Basis: None Specified

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities

Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial**Group: PCS 0006 Diesel Internal Combustion Engines****EQT 0002 - Diesel ICEs - Engines Subject to NSPS III**

- 22 [40 CFR 60.4204(c)(1)] All Models, Non-Emergency Use, and $\geq 30 \text{ L/cylinder}$ (Option 1): Nitrogen oxides $\geq 90\%$ reduction. Subpart III. [40 CFR 60.4204(c)(1)]
Which Months: All Year Statistical Basis: None specified
All Models, Non-Emergency Use, and $\geq 30 \text{ L/cylinder}$ (Option 2): Particulate matter (10 microns or less) $\leq 0.11 \text{ g/BHP-hr}$ (0.15 g/KW-hr). Subpart III. [40 CFR 60.4204(c)(2)]
Which Months: All Year Statistical Basis: None specified
All Models, Non-Emergency Use, and $\geq 30 \text{ L/cylinder}$ (Option 1): Particulate matter (10 microns or less) $\geq 60\%$ reduction. Subpart III. [40 CFR 60.4204(c)(2)]
Which Months: All Year Statistical Basis: None specified
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $< 11 \text{ HP}$: Particulate matter (10 microns or less) $\leq 0.75 \text{ g/BHP-hr}$ (1.0 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
Which Months: All Year Statistical Basis: None specified
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $\geq 11 \text{ HP} < 25 \text{ HP}$: Carbon monoxide $\leq 4.9 \text{ g/BHP-hr}$ (6.6 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
Which Months: All Year Statistical Basis: None specified
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $\geq 11 \text{ HP} < 25 \text{ HP}$: Total hydrocarbon $\leq 1.0 \text{ g/BHP-hr}$ (1.3 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
Which Months: All Year Statistical Basis: None specified
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $< 11 \text{ HP}$: Non-methane hydrocarbons plus Nitrogen oxides $\leq 7.8 \text{ g/BHP-hr}$ (10.5 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
Which Months: All Year Statistical Basis: None specified
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $\geq 11 \text{ HP} < 50 \text{ HP}$: Non-methane hydrocarbons plus Nitrogen oxides $\leq 7.1 \text{ g/BHP-hr}$ (9.5 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
Which Months: All Year Statistical Basis: None specified
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $\geq 11 \text{ HP} < 50 \text{ HP}$: Particulate matter (10 microns or less) $\leq 0.40 \text{ g/BHP-hr}$ (0.54 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
Which Months: All Year Statistical Basis: None specified
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $\geq 10 \text{ L/cylinder} < 30 \text{ L/cylinder}$, and Max Test Speed $\geq 130 \text{ RPM} < 2000 \text{ RPM}$. Nitrogen oxides $\leq 33.6 \times N^{1/2} \times 20 \text{ g/BHP-hr}$ ($45.0 \times N^{1/2} \times 20 \text{ g/KW-hr}$), where N is the appropriate maximum test speed in RPM.
Note: Round speed-dependent standards to the nearest 0.1 g/BHP-hr. Subpart III. [40 CFR 60.4205(a)]
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $\geq 11 \text{ HP} < 50 \text{ HP}$: Nitrogen oxides $\leq 6.9 \text{ g/BHP-hr}$ (9.2 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
Which Months: All Year Statistical Basis: None specified
Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $< 11 \text{ HP}$: Carbon monoxide $\leq 6.0 \text{ g/BHP-hr}$ (8.0 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities
Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial

Group: PCS 0006 Diesel Internal Combustion Engines**EQT 0002 - Diesel ICEs - Engines Subject to NSPS III**

- 34 [40 CFR 60.4205(a)]
 Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $\geq 10 \text{ L/cylinder} < 30 \text{ L/cylinder}$, and Max Test Speed $< 130 \text{ RPM}$:
 Nitrogen oxides $\leq 12.7 \text{ g/BHP-hr}$ (17.0 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
 Which Months: All Year Statistical Basis: None specified
- 35 [40 CFR 60.4205(a)]
 Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $\geq 25 \text{ HP} < 50 \text{ HP}$: Carbon monoxide $\leq 4.1 \text{ g/BHP-hr}$ (5.5 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
 Which Months: All Year Statistical Basis: None specified
- 36 [40 CFR 60.4205(a)]
 Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $\geq 175 \text{ HP}$: Carbon monoxide $\leq 8.5 \text{ g/BHP-hr}$ (11.4 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
 Which Months: All Year Statistical Basis: None specified
- 37 [40 CFR 60.4205(a)]
 Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $\geq 10 \text{ L/cylinder} < 30 \text{ L/cylinder}$, and Max Test Speed $\geq 2000 \text{ RPM}$:
 Nitrogen oxides $\leq 7.3 \text{ g/BHP-hr}$ (9.8 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
 Which Months: All Year Statistical Basis: None specified
- 38 [40 CFR 60.4205(a)]
 Pre-2007 year Models, Emergency Use excluding Fire Pump Engines, $< 10 \text{ L/cylinder}$, and $\geq 11 \text{ HP} < 50 \text{ HP}$: Particulate matter (10 microns or less) $\geq 0.60 \text{ g/BHP-hr}$ (0.80 g/KW-hr). Subpart III. [40 CFR 60.4205(a)]
 Which Months: All Year Statistical Basis: None specified
 >= 2007 year Models, Emergency Use excluding Fire Pump Engines, and $< 30 \text{ L/cylinder}$: Comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. Subpart III. [40 CFR 60.4205(b)]
 Fire Pump Engines, $< 30 \text{ L/cylinder}$, ≤ 2010 year Models, and $\geq 11 \text{ HP} < 25 \text{ HP}$: Carbon monoxide $\leq 4.9 \text{ g/BHP-hr}$ (6.6 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
 Which Months: All Year Statistical Basis: None specified
- 41 [40 CFR 60.4205(c)]
 Fire Pump Engines, $< 30 \text{ L/cylinder}$, ≥ 2011 year Models, and $\geq 50 \text{ HP} < 100 \text{ HP}$: Non-methane hydrocarbons plus Nitrogen oxides $\leq 3.5 \text{ g/BHP-hr}$ (4.7 g/KW-hr). Note: 2011-2013 year models that are $\geq 50 \text{ HP} < 100 \text{ HP}$ with rated speed of $> 2,650 \text{ rpm}$ may comply with the emission limitations for 2010 year models of the same capacity. Subpart III. [40 CFR 60.4205(c)]
 Which Months: All Year Statistical Basis: None specified
- 42 [40 CFR 60.4205(c)]
 Fire Pump Engines, $< 30 \text{ L/cylinder}$, and ≤ 2010 year Models and $< 11 \text{ HP}$ or $\geq 50 \text{ HP} < 100 \text{ HP}$, or ≤ 2009 year Models and $\geq 100 \text{ HP} < 175 \text{ HP}$, or ≤ 2008 year Models and $\geq 175 \text{ HP} < 750 \text{ HP}$, or ≤ 2007 year Models and $> 750 \text{ HP}$: Non-methane hydrocarbons plus Nitrogen oxides $\leq 7.8 \text{ g/BHP-hr}$ (10.5 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
 Which Months: All Year Statistical Basis: None specified
- 43 [40 CFR 60.4205(c)]
 Fire Pump Engines, $< 30 \text{ L/cylinder}$, and $\geq 11 \text{ HP} < 50 \text{ HP}$: Non-methane hydrocarbons plus Nitrogen oxides $\leq 7.1 \text{ g/BHP-hr}$ (9.5 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
 Which Months: All Year Statistical Basis: None specified
- 44 [40 CFR 60.4205(c)]
 Fire Pump Engines, $< 30 \text{ L/cylinder}$, ≥ 2011 year Models, and $< 25 \text{ HP}$ or $\geq 50 \text{ HP} < 100 \text{ HP}$: Particulate matter (10 microns or less) $\leq 0.30 \text{ g/BHP-hr}$ (0.40 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
 Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS**All ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities**

Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source|Small Source Initial**Group: PCS 0006 Diesel Internal Combustion Engines****EQT 0002 - Diesel ICES - Engines Subject to NSPS III**

- 45 [40 CFR 60.4205(c)] Fire Pump Engines; < 30 L/cylinder; and >= 2009 year Models and >= 175 HP < 750 HP, or >= 2008 year Models and > 750 HP: Particulate matter (10 microns or less) <= 0.15 g/BHP-hr (0.20 g/KW-hr). Note: 2009-2011 year models that are >= 175 HP < 600 HP with rated speed of > 2,650 rpm may comply with the emission limitations for 2008 year models of the same capacity. Subpart III. [40 CFR 60.4205(c)]
- 46 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines; < 30 L/cylinder; and >= 2011 year Models and >= 25 HP < 50 HP, or >= 2010 year Models and >= 100 HP < 175 HP:
Particulate matter (10 microns or less) <= 0.22 g/BHP-hr (0.30 g/KW-hr). Note: 2010-2012 year models that are >= 100 HP < 175 HP with rated speed of > 2,650 rpm may comply with the emission limitations for 2009 year models of the same capacity. Subpart III. [40 CFR 60.4205(c)]
- 47 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines, < 30 L/cylinder, <= 2010 year Models, and >= 25 HP < 50 HP: Carbon monoxide <= 4.1 g/BHP-hr (5.5 g/KW-hr).
Subpart III. [40 CFR 60.4205(c)]
- 48 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines; < 30 L/cylinder; and >= 2010 year Models and >= 100 HP < 175 HP, or >= 2009 year Models and >= 175 HP < 750 HP:
Non-methane hydrocarbons plus Nitrogen oxides <= 3.0 g/BHP-hr (4.0 g/KW-hr). Note: 2009-2012 year models that are >= 100 HP < 600 HP with rated speed of > 2,650 rpm may comply with the emission limitations for 2008 - 2009 year models of the same capacity. Subpart III. [40 CFR 60.4205(c)]
- 49 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines, < 30 L/cylinder, >= 2011 year Models, and < 50 HP: Non-methane hydrocarbons plus Nitrogen oxides <= 5.6 g/BHP-hr (7.5 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
- 50 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines, < 30 L/cylinder, and <= 2010 year Models and >= 11 HP < 175 HP or <= 2009 year Models >= 100 HP < 175 HP:
Particulate matter (10 microns or less) <= 0.60 g/BHP-hr (0.80 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
- 51 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines; < 30 L/cylinder; and <= 2008 year Models and >= 175 HP < 750 HP, or <= 2007 year Models and > 750 HP: Carbon monoxide <= 2.6 g/BHP-hr (3.5 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
- 52 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines; < 30 L/cylinder; <= 2010 year Models and >= 50 HP < 100 HP, or <= 2009 year Models and >= 100 HP < 175 HP:
Carbon monoxide <= 3.7 g/BHP-hr (5.0 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
- 53 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines, < 30 L/cylinder, >= 2008 year Models, and >= 750 HP: Non-methane hydrocarbons plus Nitrogen oxides <= 4.8 g/BHP-hr (6.4 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
- 54 [40 CFR 60.4205(c)] Which Months: All Year Statistical Basis: None specified
Fire Pump Engines, < 30 L/cylinder, <= 2010 year Models, and < 11 HP: Carbon monoxide <= 6.0 g/BHP-hr (8.0 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
- Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities

Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit

Air - Minor Source/Small Source Initial

Group: PCS 0006 Diesel Internal Combustion Engines

EQT 0002 - Diesel ICEs - Engines Subject to NSPS III

- 55 [40 CFR 60.4205(c)] Fire Pump Engines; < 30 L/cylinder; and <= 2008 year Models and >= 175 HP < 750 HP, or <= 2007 year Models and > 750 HP. Particulate matter (10 microns or less) <= 0.40 g/BHP-hr (0.54 g/KW-hr). Note: 2011-2013 year models that are >= 50 HP < 100 HP with rated speed of > 2,650 rpm may comply with the emission limitations for 2010 year models of the same capacity. [40 CFR 60.4205(c)]
- Which Months: All Year Statistical Basis: None specified
- 56 [40 CFR 60.4205(c)] Fire Pump Engines, < 30 L/cylinder, <= 2010 year Models, and < 1 HP: Particulate matter (10 microns or less) <= 0.75 g/BHP-hr (1.0 g/KW-hr). Subpart III. [40 CFR 60.4205(c)]
- Which Months: All Year Statistical Basis: None specified
- 57 [40 CFR 60.4205(d)(1)] All Models, All Emergency Use, and >= 30 L/cylinder (Option 1): Nitrogen oxides >= 90 % reduction. Subpart III. [40 CFR 60.4205(d)(1)]
- Which Months: All Year Statistical Basis: None specified
- 58 [40 CFR 60.4205(d)(1)] All Models, All Emergency Use, and >= 30 L/cylinder (Option 2): Nitrogen oxides <= 1.2 g/BHP-hr (1.6 g/KW-hr). Subpart III. [40 CFR 60.4205(d)(1)]
- Which Months: All Year Statistical Basis: None specified
- All Models, All Emergency Use, and >= 30 L/cylinder (Option 2): Particulate matter (10 microns or less) <= 0.11 g/BHP-hr (0.15 g/KW-hr). Subpart III. [40 CFR 60.4205(d)(2)]
- Which Months: All Year Statistical Basis: None specified
- All Models, All Emergency Use, and >= 30 L/cylinder (Option 1): Particulate matter (10 microns or less) >= 60 % reduction. Subpart III. [40 CFR 60.4205(d)(2)]
- Which Months: All Year Statistical Basis: None specified
- Operate and maintain stationary CI ICE according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. Subpart III.
- Beginning October 1, 2007, use diesel fuel that meets the requirements of 40 CFR 80.510(a). Subpart III. [40 CFR 60.4207(a)]
- Beginning October 1, 2010, use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. Subpart III. [40 CFR 60.4207(b)]
- Comply with all applicable deadlines specified in 40 CFR 60.4208(a) through (h). Subpart III.
- 61 [40 CFR 60.4206] All Models, All Emergency Use, All Displacements: Operating time monitored by hour/time monitor continuously during operation. Install a non-resettable hour meter prior to startup of the engine. Subpart III. [40 CFR 60.4209(a)]
- 62 [40 CFR 60.4207(a)] Which Months: All Year Statistical Basis: None specified
- Engines Equipped w/ Diesel Particulate Filter: Pressure monitored by pressure instrument continuously during operation. Install a backpressure monitor on the diesel particulate filter that notifies the owner or operator when the high backpressure limit of the engine is approached. Subpart III. [40 CFR 60.4209(b)]
- 63 [40 CFR 60.4207(b)] Which Months: All Year Statistical Basis: None specified
- Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, only change those settings that are permitted by the manufacturer. Also meet the requirements of 40 CFR 89, 94 and/or 1068, as applicable. Subpart III. [40 CFR 60.4211(a)]
- 64 [40 CFR 60.4208]
- 65 [40 CFR 60.4209(a)]
- 66 [40 CFR 60.4209(b)]
- 67 [40 CFR 60.4211(a)]

SPECIFIC REQUIREMENTS**AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities****Activity Number: PER20080001****Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial****Group: PCS#0006 Diesel Internal Combustion Engines****ECR 0002 - Diesel ICES - Engines Subject to NSPS III**

- 68 [40 CFR 60.4211(b)] < 30 L/cylinder, All Uses, and Pre-2007 year Models, as well as Fire Pump Engines < 100 HP built before 2011 or >= 100 HP < 175 HP built before 2010 or >= 175 HP < 750 built before 2009 or > 750 HP built before 2008: Demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (b)(5). Subpart III. [40 CFR 60.4211(b)]
- 69 [40 CFR 60.4211(c)] < 30 L/cylinder, All Uses, and >= 2007 year Models except for Fire Pump Engines < 100 HP built before 2011 or >= 100 HP < 175 HP built before 2010 or >= 175 HP < 750 built before 2009 or > 750 HP built before 2008: Ensure engine is certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4025(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. Install and configure according to the manufacturer's specifications. Subpart III. [40 CFR 60.4211(c)]
- 70 [40 CFR 60.4211(d)(1)] All Models, All Uses, and >= 30 L/cylinder: Conduct an initial performance test to demonstrate initial compliance with the emission standards as specified in 40 CFR 60.4213. Subpart III. [40 CFR 60.4211(d)(1)]
- 71 [40 CFR 60.4211(d)(2)] All Models, All Uses, and >= 30 L/cylinder: Submit petition to LDEQ for approval of operating parameters to be monitored continuously. Subpart III. [40 CFR 60.4211(d)(2)]
- 72 [40 CFR 60.4211(d)(2)] All Models, All Uses, and >= 30 L/cylinder: Equipment/operational data monitored by technically sound method continuously. Subpart III. [40 CFR 60.4211(d)(2)]
- 73 [40 CFR 60.4211(d)(3)] Which Months: All Year Statistical Basis: None specified All Models, Non-Emergency Use, and >= 30 L/cylinder: Conduct annual performance tests to demonstrate continuous compliance with the emission standards as specified in 40 CFR 60.4213. Subpart III. [40 CFR 60.4211(d)(3)]
- 74 [40 CFR 60.4211(e)] All Emergency Use and All Displacements: Operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Limit maintenance checks and readiness testing to 100 hours per year. There is no time limit during use in emergency situations. A petition for approval of additional hours to be used for maintenance checks and readiness testing may be submitted to LDEQ, but a petition is not required if records are maintained indicating that Federal, State, or local standards require maintenance and testing of emergency engines beyond 100 hours per year. Any operation other than emergency operations, and maintenance and testing as allowed per 40 CFR 60.4211(e) for emergency engines subject to standards under 40 CFR 60.4205, is prohibited. Subpart III. [40 CFR 60.4211(e)]
- 75 [40 CFR 60.4212] Engines subject to 40 CFR 62.4211(b): Conduct performance tests according to 40 CFR 60.4212(a) through (d). Subpart III.
- 76 [40 CFR 60.4213(d)] Engines subject to 40 CFR 62.4211(d) complying with percent reductions per 40 CFR 60.4204(c) or 4205(d): Determine compliance with the percent reduction requirement using the methods and procedures specified in 40 CFR 60.4213(d)(1) through (d)(3). Subpart III. [40 CFR 60.4213(d)]
- 77 [40 CFR 60.4213(e)] Engines subject to 40 CFR 62.4211(d) complying with NOx mass/unit output limit per 40 CFR 60.4204(c) or 4205(d): Determine compliance with the NOx mass per unit output emission limitation by converting the concentration of NOx in engine exhaust using 40 CFR 60.4213(e), Equation 7. Subpart III. [40 CFR 60.4213(e)]
- 78 [40 CFR 60.4213(f)] Engines subject to 40 CFR 62.4211(d) complying with PM mass/unit output limit per 40 CFR 60.4204(c) or 4205(d): Determine compliance with the PM mass per unit output emission limitation by converting the concentration of PM in the engine exhaust using 40 CFR 60.4213(f), Equation 8. Subpart III. [40 CFR 60.4213(f)]
- 79 [40 CFR 60.4213] Engines subject to 40 CFR 62.4211(d): Conduct performance tests according to 40 CFR 60.4213(a) through (c). Subpart III.

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities

Activity Number: PER2008001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial**Group: PCS 0006 Diesel Internal Combustion Engines****EQT 0002 - Diesel ICES - Engines Subject to NSPS III**

- 80 [40 CFR 60.4214(a)(1)] Non-Emergency Use, and $> 3,000 \text{ HP}$ or $\geq 10 \text{ L/cylinder}$ or Non-Certified Pre-2007 year Models $> 175 \text{ HP}$: Submit an initial notification as required in 40 CFR 60.7(a)(1). Include the information in 40 CFR 60.4214(a)(1) through (a)(1)(iv). Subpart IIII. [40 CFR 60.4214(a)(1)] Non-Emergency Use, and $> 3,000 \text{ HP}$ or $\geq 10 \text{ L/cylinder}$ or Non-Certified Pre-2007 year Models $> 175 \text{ HP}$: Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information in 40 CFR 60.4214(a)(2)(i) through (a)(2)(iv). Subpart IIII. [40 CFR 60.4214(a)(2)]
- 82 [40 CFR 60.4214(b)] Emergency Use and ≥ 2011 year Model: Operating time recordkeeping by electronic or hard copy upon occurrence of event. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. Record the time of operation of the engine and the reason the engine was in operation during that time. Subpart IIII. [40 CFR 60.4214(b)]
- 83 [40 CFR 60.4214(c)] Engines Equipped with Diesel Particulate Filter: Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. Subpart IIII. [40 CFR 60.4214(c)]

EQT 0017 - All Diesel ICES

- 84 [40 CFR 63.6590(c)] An affected source that is a new or reconstructed stationary RICE located at an area source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII. No further requirements apply for such engines under 40 CFR 63. Subpart ZZZZ. [40 CFR 63.6590(c)]
- 85 [LAC 33:III.101.B] Opacity ≤ 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
- 86 [LAC 33:III.1311.C] Which Months: All Year Statistical Basis: None specified
Opacity ≤ 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
Which Months: All Year Statistical Basis: Six-minute average

EQT 0018 - Diesel ICES $\geq 500 \text{ hp}$ & Operating $> 720 \text{ Hours in Any 6-Month Period and Not Subject to NSPS III}$

- 87 [LAC 33:III.501.C.6] During a state of emergency declared by the Governor, operating time of diesel-fired internal combustion engines whose operation is typically limited to emergency situations (e.g., involuntary power curtailment, power unavailability, maintenance activity that requires the main source of power to be shut down) and required readiness testing and maintenance checks shall not count towards the 720 hour threshold triggering stack testing requirements.
- 88 [LAC 33:III.501.C.6] Equipment/operational data recordkeeping by electronic or hard copy semiannually (annually if the ICE is equipped with catalytic controls). Recorded parameters are NO_x, CO, and O₂ concentrations in the stack gas obtained during semiannual (or annual) testing.

SPECIFIC REQUIREMENTS**AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities**

Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial**Group: PCS 0006 Diesel Internal Combustion Engines****EQT 0018 - Diesel ICEs >= 500 hp & Operating > 720 Hours in Any 6-Month Period and Not Subject to NSPS III**

89 [LAC 33:III.501.C.6]

Stack gas concentration: Carbon monoxide monitored by portable analyzer semiannually (six months after the stack test or previous semiannual test, plus or minus 30 days). Maintain concentrations of CO in a range that demonstrates compliance with permit limits. Calibrate portable analyzers before each test using a known reference gas sample. CO may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls.

90 [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: None specified
Submit notification: Due at least 30 days prior to any LDEQ required performance/emissions test to the Office of Environmental Assessment, to provide the opportunity to conduct a pretest meeting and observe the emission testing.

Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment.

The test results summary shall include any necessary conversion into the units of any applicable standard (e.g., lb/hr, g/hp-hr).

Stack gas concentration: Oxygen monitored by portable analyzer semiannually (six months after the stack test or previous semiannual test, plus or minus 30 days). Maintain concentrations of O₂ in the same range as during the initial stack test. Calibrate portable analyzers before each test using a known reference gas sample. O₂ may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls.

91 [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: None specified
Stack gas concentration: Nitrogen oxides monitored by portable analyzer semiannually (six months after the stack test or previous semiannual test, plus or minus 30 days). Maintain concentrations of NO_x in a range that demonstrates compliance with permit limits. Calibrate portable analyzers before each test using a known reference gas sample. NO_x may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls.

93 [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: None specified
Conduct a performance/emissions test: Due within 180 days after initial startup (or restart-up after modification), or within 60 days after achieving normal production rate or end of the shutdown period, whichever is earliest. The stack test's purpose is to verify potential emissions of the emissions unit. Repeat the test after each major engine overhaul. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources and Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.

Group: PCS 0007 Flares

Group Members: EQT 0007 EQT 0024

EQT 0007 - Flares Controlling Offgas from Amine Regenerator Vents

95 [LAC 33:III.501.C.6]

Flare gas: Heat content > 300 BTU/scf to ensure destruction of emissions to the flare stack.

Which Months: All Year Statistical Basis: None specified

Flare gas: Heat content recordkeeping by electronic or hard copy annually.

SPECIFIC REQUIREMENTS**AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities**

Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial**Group: PCS 0007 Flares****EQT 0007 - Flares Controlling Offgas from Amine Regenerator Vents**

97 [LAC 33:III.501.C.6]

Flare gas: Heat content monitored by gas analysis annually to ensure the heat content is above 300 BTU/scf.
Which Months: All Year Statistical Basis: None specified**EQT 0024 - All Flares**

98 [LAC 33:III.1105]

Submit notification: Due to SPOC as soon as possible after the start of burning of pressure valve releases for control over process upsets.

Notify in accordance with LAC 33:1.3923. Notification is required only if the upset cannot be controlled in six hours.

Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets.

Which Months: All Year Statistical Basis: None specified

Submit report if requesting exemption from the provisions of LAC 33:III.1105: Due in writing to SPOC within seven calendar days after startup or shutdown, if flaring was not the result of failure to maintain or repair equipment. Explain the conditions and duration of the startup or shutdown and list the steps necessary to remedy, prevent and limit the excess emissions. Minimize flaring and ensure that no ambient air quality standards are jeopardized.

Develop a corrective action plan for re-lighting the flare. Plan must be kept readily available for immediate implementation in the event the flare needs to be re-lit.

100 [LAC 33:III.1107]

Flare gas: Heat content > 300 BTU/scf to ensure destruction of emissions to the flare stack.

Which Months: All Year Statistical Basis: None specified

Option 2: Ensure the continuous presence of a flame by documenting daily visual observation of the continuous presence of a flame. Keep these records on site and available for inspection. An alternate site to store records may be used with prior approval.

101 [LAC 33:III.501.C.6]
Flare gas: Heat content monitored by gas analysis annually to ensure the heat content is above 300 BTU/scf. For flares that do not control offgas from amine regenerator vents (see EQT 0007), LDEQ will allow use of a sales gas analysis to satisfy the requirement that the heat content of flare gas is above 300 BTU/scf, provided:

1. the gas streams to the flare are sampled once to prove that they have a higher BTU value than the sales gas stream, and
2. streams to the flare are resampled after any change in process conditions that is expected to alter the heat content of the flare gas.

Which Months: All Year Statistical Basis: None specified

Option 1: Ensure the continuous presence of a flame by installing, maintaining, and operating according to manufacturer's specifications a heat sensing device to detect the continuous presence of a flame. Alternate devices may be used with the prior approval. Keep these records on site and available for inspection. An alternate site to store records may be used with prior approval.

102 [LAC 33:III.501.C.6]

Flare gas: Heat content recordkeeping by electronic or hard copy annually.

Group: PCS 0001 Fugitive Emissions

Group Number: FUG 0001 FUG 0002

FUG 0001 - Fugitive Emissions - All Facilities

SPECIFIC REQUIREMENTS**A1 ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities****Activity Number: PER20080001****Permit Number: Minor Source Oil & Gas General Master Permit**
Air - Minor Source/Small Source Initial**Group: PCS 0001 Fugitive Emissions****FUG 0001 - Fugitive Emissions - All Facilities**

- 107 [LAC 33:III.1305] Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33:III.1305.A.1-7.
- 108 [LAC 33:III.2111] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.

FUG 0002 - Fugitive Emissions - Facilities Extracting Natural Gas Liquids from Field Gas by a "Forced" J-T Process and Subject to NSPS KKK

- 109 [40 CFR 60.632(a)] Comply with the requirements specified in 40 CFR 60.482-1(a), (b), and (d) and 40 CFR 60.482-2 through 60.482-10, except as provided in 40 CFR 60.633, as soon as practicable, but no later than 180 days after initial startup. Subpart KKK. [40 CFR 60.632(a)]
- 110 [40 CFR 60.632(d)] Comply with the provisions of 40 CFR 60.485 except as provided in 40 CFR 60.632(f) and 60.633(h). Subpart KKK. [40 CFR 60.632(d)]
- 111 [40 CFR 60.632(e)] Comply with the provisions of 40 CFR 60.486 and 60.487 except as provided in 40 CFR 60.633, 60.635, and 60.636. Subpart KKK. [40 CFR 60.632(e)]
- 112 [40 CFR 60.632(f)] Demonstrate that a piece of equipment is not in VOC service or in wet gas service by using the specified methods. Subpart KKK. [40 CFR 60.632(f)]

- 113 [40 CFR 60.635(c)] Compressors: Equipment/operational data recordkeeping by logbook at the approved frequency. Record and keep information and data used to demonstrate that a reciprocating compressor is in wet gas service in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.633(f). Subpart KKK. [40 CFR 60.635(c)]

Group: PCS 0004 Glycol Dehydration Units**Group Members: EQT 0003 EQT 0014 EQT 0021 EQT 0023 EQT 0026****EQT 0003 - Glycol Dehydration Unit Process Vents Constructed Prior to October 20, 1994 Subject to LAC 33:III.2116**

- 114 [LAC 33:III.2116.B.1.a] VOC, Total $\geq 70\%$ reduction. If the control device is a condenser, annually achieve an average final exhaust temperature less than 110 degrees F. Percent reduction shall be demonstrated by using the methods found in LAC 33:III.2116.D.

- 115 [LAC 33:III.2116.B.3] Which Months: All Year Statistical Basis: None specified Glycol dehydration units (using a flare to control emissions): Ensure destruction of emissions to the flare stack by maintaining the heat content of the flare gas above 300 BTU/scf and by documenting daily visual observations of the continuous presence of a flame. Perform a gas analysis representative of the flare stream, showing the heat content, annually and make available for inspection.

- 116 [LAC 33:III.2116.F.3] Glycol dehydration units (using a condenser to control emissions): Maintain a record of the final exhaust temperature and time observed recorded twice a week on different days during daylight hours; and maintain a record of all temperature exceedances greater than or equal to 120 degrees F, the date of each temperature exceedance, and a brief explanation describing the circumstances of the temperature exceedance.

- 117 [LAC 33:III.2116.F] Glycol dehydration units: Keep records of the results of any testing conducted in accordance with LAC 33:III.2116.D, and keep records of the date of any maintenance and repair of the required control device and the duration of uncontrolled emissions during such activities.
- 118 [LAC 33:III.501.C.6] As an alternative to documenting daily visual observations of a flame as described in LAC 33:III.2116.B.3, the permittee may install, maintain, and operate according to manufacturer's specifications a heat sensing device to detect the continuous presence of a flame.

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities

Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial**Group: PCS 0004 Glycol Dehydration Units****EQT 0014 - Glycol Reboilers**

- 119 [LAC 33:III.101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
Which Months: All Year Statistical Basis: None specified
Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
Which Months: All Year Statistical Basis: None specified

EQT 0021 - Glycol Dehydration Unit Process Vents Constructed On or After October 20, 1994 Subject to LAC 33:III.2116

- 121 [LAC 33:III.2116.B.2] VOC, Total >= 85 % reduction using a control device. Demonstrate percent reduction using the methods found in LAC 33:III.2116.D.
Which Months: All Year Statistical Basis: None specified
Glycol dehydration units (using a flare to control emissions): Ensure destruction of emissions to the flare stack by maintaining the heat content of the flare gas above 300 BTU/scf and by documenting daily visual observations of the continuous presence of a flame. Perform a gas analysis representative of the flare stream, showing the heat content, annually and make available for inspection.
Glycol dehydration units: Keep records of the results of any testing conducted in accordance with LAC 33:III.2116.D, and keep records of the date of any maintenance and repair of the required control device, and the duration of uncontrolled emissions during such activities.
As an alternative to documenting daily visual observations of a flame as described in LAC 33:III.2116.B.3, the permittee may install, maintain, and operate according to manufacturer's specifications a heat sensing device to detect the continuous presence of a flame.

EQT 0023 - Glycol Dehydration Unit Process Vents - Exempt from LAC 33:III.2116

- 122 [LAC 33:III.2116.B.3] Glycol dehydration units (requesting exemption from LAC 33:III.2116): Demonstrate to DEQ, using method or methods found in LAC 33:III.2116.D, that the total uncontrolled VOC emissions from the glycol dehydrator are not in excess of nine tons per year.
Glycol dehydration units (requesting exemption from LAC 33:III.2116.C.1, OR keep records of total hours of operation on an annual basis if claiming an exemption from LAC 33:III.2116 under LAC 33:III.2116.C.1, OR keep records of the actual throughput per day and the glycol circulation rate if claiming an exemption from LAC 33:III.2116 under LAC 33:III.2116.C.2.

EQT 0026 - All Glycol Dehydration Unit Process Vents

- 127 [40 CFR 63.774(d)] Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep records of the information specified in 40 CFR 63.774(d)(1) or (d)(1)(ii), as applicable. Subpart HH. [40 CFR 63.774(d)]
Glycol dehydration units for which construction commenced after the effective date of the general permit ONLY: No later than 180 days after operations commence, the owner or operator shall recalculate emissions from the glycol dehydration unit using a site-specific wet gas analysis from a sample collected upstream of the dehydration system. These records shall be retained on site and made available for inspection by the Office of Environmental Compliance, Surveillance Division. If emissions are in excess of previous estimates, the owner of operator shall follow the appropriate procedures described in General Condition III of the general permit.

SPECIFIC REQUIREMENTS**A1 ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities****Activity Number: PER20080001****Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial****Group: PCS 0002 Miscellaneous Fuel Burning Equipment**

Group Members: EQT 0011 EQT 0012

EQT 0011 - Heater Treaters

129 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

130 [LAC 33:III.1313.C] Which Months: All Year Statistical Basis: None specified

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
Which Months: All Year Statistical Basis: None specified

EQT 0012 - Line Heaters

131 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

132 [LAC 33:III.1313.C] Which Months: All Year Statistical Basis: None specified

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
Which Months: All Year Statistical Basis: None specified

Group: PCS 0005 Natural Gas Internal Combustion Engines

Group Members: EQT 0001 EQT 0015 EQT 0016 EQT 0019 EQT 0020

EQT 0001 - Natural Gas ICEs - Engines Subject to Chapter 22

133 [LAC 33:III.2201.D.] Lean burn engines >= 1500 hp: Nitrogen oxides <= 4 g/BHP-hr.

Which Months: May-Sep Statistical Basis: Thirty-day rolling average

Rich burn engines >= 300 hp: Nitrogen oxides <= 2 g/BHP-hr.

Which Months: May-Sep Statistical Basis: Thirty-day rolling average

Perform NOx emissions testing for all point sources that are subject to the emission limitations of LAC 33:III.2201.D or used in one of the alternative plans of LAC 33:III.2201.E, as specified in LAC 33:III.2201.G.2 through G.7. Test results must demonstrate that actual NOx emissions are in compliance with the appropriate limits of LAC 33:III.Chapter 22. Also measure CO, SO2, PM10, and VOC if modifications could cause an increase in emissions of any of these compounds.

Test NOx emissions after each occurrence of catalyst replacement. Maintain documentation on-site, if practical, of the date, the person doing the test, and the test results. Make documentation available for inspection upon request.

Option 1: Perform annual testing for NOx and CO with an approved portable analyzer.

Option 1: Operate the engine within the fuel limits established during the initial compliance run.

Option 1: Fuel monitored by totalizer continuously. Monitor fuel usage with a totalizing fuel meter.
Which Months: May-Sep Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities

Activity Number: PER2008001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial**Group: PCS 0005 Natural Gas Internal Combustion Engines****EQT 0001 - Natural Gas ICEs - Engines Subject to Chapter 22**

- 140 [LAC 33:III.2201.H.4.a] Option 1: Perform triennial stack testing for NO_x and CO in accordance with the methods specified in LAC:III.2201.G.5.
 141 [LAC 33:III.2201.H.b] Option 2: Fuel monitored by totalizer continuously. Monitor fuel usage with a totalizing fuel meter.
 Which Months: May-Sep Statistical Basis: None specified
- 142 [LAC 33:III.2201.H.4.b] Option 2: Diluent - either Oxygen or Carbon dioxide monitored by the regulation's specified method(s) continuously. Monitor oxygen or carbon dioxide using a diluent monitor in accordance with the requirements of LAC 33:III.2201.H.i.b.ii.
- Which Months: May-Sep Statistical Basis: None specified
- 143 [LAC 33:III.2201.H.4.b] Option 2: Nitrogen oxides monitored by continuous emission monitor (CEM) continuously.
 Which Months: May-Sep Statistical Basis: None specified
- 144 [LAC 33:III.2201.H.b] Option 3: Nitrogen oxides monitored by the regulation's specified method(s) continuously. Predict NO_x, diluent (O₂ or CO₂), and CO emissions for each affected point source using a PEMS. Operate PEMS in accordance with the requirements of LAC 33:III.2201.H.i.b.v.
- Which Months: May-Sep Statistical Basis: None specified
- 145 [LAC 33:III.2201.H.4.b] Option 2: Carbon monoxide monitored by the regulation's specified method(s) continuously. Monitor carbon monoxide using a CO monitor.
 Which Months: May-Sep Statistical Basis: None specified
- 146 [LAC 33:III.2201.I.1] Submit test results: Due within 60 days after completing the emission testing required in LAC 33:III.2201.I.1.
- 147 [LAC 33:III.2201.I.1] Submit Notification: Due at least 30 days prior to any compliance testing conducted under LAC 33:III.2201.G and any CEMS or PEMS performance evaluation conducted under LAC 33:III.2201.H in order to give DEQ an opportunity to conduct a pretest meeting and observe the emission testing.
- 148 [LAC 33:III.2201.I.1] Submit report: Due within 90 days of the end of each quarter for any noncompliance of the applicable emission limitations of LAC 33:III.2201.D or E. Include the information specified in LAC 33:III.2201.I.2.a through I.2.d.
- 149 [LAC 33:III.2201.I.] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records of the information specified in LAC 33:III.2201.I.3 and I.4 as applicable.
- 150 [LAC 33:III.2201.J.2] Complete all initial compliance testing, specified by LAC 33:III.2201.G, for equipment modified with NO_x reduction controls or a NO_x monitoring system to meet the provisions of LAC 33:III.Chapter 22 within 60 days of achieving normal production rate or after the end of the shake down period, but in no event later than 180 days after initial start-up, except as provided in LAC 33:III.2202.

EQT 0015 - Natural Gas ICEs - Engines Subject to NSPS JJJJ

- 151 [40 CFR 60.423.3(d)-(e)] New, Emergency Use, and > 25 HP < 130 HP: Carbon monoxide <= 387 g/BHP-hr (0.853 lb/HP-hr). Subpart JJJJ.
 Which Months: All Year Statistical Basis: None specified
- 152 [40 CFR 60.423.3(d)-(e)] New, Emergency Use, and > 25 HP < 130HP: Hydrocarbons and Nitrogen oxides <= 10 g/BHP-hr (0.022 lb/HP-hr). Subpart JJJJ.
 Which Months: All Year Statistical Basis: None specified
- 153 [40 CFR 60.423.3(a)] New, All Uses, and <= 25 HP: Comply with the emission standards and other requirements for new nonroad SI engines in 40 CFR 90. Subpart JJJJ. [40 CFR 60.423.3(a)]
- 154 [40 CFR 60.423.3(d)] New, Non-Emergency Use, and > 25 HP < 100HP: Comply with the emission standards for field testing in 40 CFR 1048.101(c). Subpart JJJJ. [40 CFR 60.423.3(d)]

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities

Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial**Group: PCS 0005 Natural Gas Internal Combustion Engines****EQT 0015 - Natural Gas ICEs - Engines Subject to NSPS JJJ**

- 155 [40 CFR 60.4233(e)] New, Non-Emergency Use, and $\geq 100 \text{ HP} < 500 \text{ HP}$ built before 1/1/2011 or $> 500 \text{ HP}$ built before 7/1/2010; or New, Emergency Use, and $\geq 130 \text{ HP}$. VOC, Total $\leq 1.0 \text{ g/BHP-hr}$ (excluding formaldehyde) (0.0022 lb/HP-hr; 86 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(e)]
- 156 [40 CFR 60.4233(e)] Which Months: All Year Statistical Basis: None specified New, Non-Emergency Use, and $\geq 100 \text{ HP} < 500 \text{ HP}$ built on/after 1/1/2011 or $> 500 \text{ HP}$ built on/after 7/1/2010: Nitrogen oxides $\leq 1.0 \text{ g/BHP-hr}$ (0.0022 lb/HP-hr; 82 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(e)]
- 157 [40 CFR 60.4233(e)] Which Months: All Year Statistical Basis: None specified New, Non-Emergency Use, and $\geq 100 \text{ HP} < 500 \text{ HP}$ built before 1/1/2011 or $> 500 \text{ HP}$ built before 7/1/2010; or New, Emergency Use, and $\geq 130 \text{ HP}$. Nitrogen oxides $\leq 2.0 \text{ g/BHP-hr}$ (0.0044 lb/HP-hr; 160 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(e)]
- 158 [40 CFR 60.4233(e)] Which Months: All Year Statistical Basis: None specified New, Non-Emergency Use, and $\geq 100 \text{ HP} < 500 \text{ HP}$ built before 1/1/2011 or $> 500 \text{ HP}$ built before 7/1/2010; or New, Emergency Use, and $\geq 130 \text{ HP}$. Carbon monoxide $\leq 4.0 \text{ g/BHP-hr}$ (0.0088 lb/HP-hr; 540 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(e)]
- 159 [40 CFR 60.4233(e)] Which Months: All Year Statistical Basis: None specified New, Non-Emergency Use, and $\geq 100 \text{ HP} < 500 \text{ HP}$ built on/after 1/1/2011 or $> 500 \text{ HP}$ built on/after 7/1/2010: VOC, Total $\leq 0.7 \text{ g/BHP-hr}$ (excluding formaldehyde) (0.00154 lb/HP-hr; 60 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(e)]
- 160 [40 CFR 60.4233(e)] Which Months: All Year Statistical Basis: None specified New, Non-Emergency Use, and $\geq 100 \text{ HP} < 500 \text{ HP}$ built on/after 1/1/2011 or $> 500 \text{ HP}$ built on/after 7/1/2010: Carbon monoxide $\leq 2.0 \text{ g/BHP-hr}$ (0.0044 lb/HP-hr; 270 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(e)]
- 161 [40 CFR 60.4233(f)(1)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, All Uses, and $\geq 25 \text{ HP}$: Comply with the emission standards and other requirements for new nonroad SI engines in 40 CFR 90. Subpart JJJ. [40 CFR 60.4233(f)(1)]
- 162 [40 CFR 60.4233(f)(4)] Modified/Reconstructed, Non-Emergency Use, and $\geq 130 \text{ HP} < 500 \text{ HP}$ built before 7/1/2007 or $\geq 500 \text{ HP}$ built before 7/1/2008; or ppmvd at 15% O₂. Subpart JJJ. [40 CFR 60.4233(f)(4)]
- 163 [40 CFR 60.4233(f)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Emergency Use, and $> 25 \text{ HP} < 130 \text{ HP}$: Carbon monoxide $\leq 387 \text{ g/BHP-hr}$ (0.853 lb/HP-hr). Subpart JJJ. [40 CFR 60.4233(f)(4)]
- 164 [40 CFR 60.4233(f)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Non-Emergency Use, and $\geq 100 \text{ HP} < 130 \text{ HP}$ built on/after 7/1/08 but before 1/1/2011: VOC, Total $\leq 1.0 \text{ g/BHP-hr}$ (excluding formaldehyde) (0.0022 lb/HP-hr; 86 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(f)(4)]
- 165 [40 CFR 60.4233(f)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Non-Emergency Use, and $\geq 100 \text{ HP} < 130 \text{ HP}$ built on/after 7/1/08 but before 1/1/2011: Carbon monoxide $\leq 4.0 \text{ g/BHP-hr}$ (0.0088 lb/HP-hr; 540 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(f)(4)]
- Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities

Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial

Group: PCS 0005 Natural Gas Internal Combustion Engines**EQT 0015 - Natural Gas ICEs - Engines Subject to NSPS JJJ**

- 166 [40 CFR 60.4233(D)(4)] Modified/Reconstructed, Non-Emergency Use, and $\geq 130 \text{ HP} < 500 \text{ HP}$ built before 7/1/2007 or $\geq 500 \text{ HP}$ built before 7/1/2008, or Modified/Reconstructed, Emergency Use, and $\geq 130 \text{ HP}$ built before 7/1/2009. Carbon monoxide $\leq 4.0 \text{ g/BHP-hr}$ (0.0088 lb/HP-hr; 540 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(D)(4)]
- 167 [40 CFR 60.4233(D)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Non-Emergency Use, and $> 25 \text{ HP} < 100 \text{ HP}$ built on/after 7/1/2008: Comply with the emission standards for field testing in 40 CFR 1048.101(c). Subpart JJJ. [40 CFR 60.4233(D)(4)]
- 168 [40 CFR 60.4233(D)(4)] Modified/Reconstructed, Non-Emergency Use, and $\geq 100 \text{ HP} < 130 \text{ HP}$ built on/after 1/1/2011: VOC, Total $\leq 0.7 \text{ g/BHP-hr}$ (excluding formaldehyde) (0.00154 lb/HP-hr; 60 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(D)(4)]
- 169 [40 CFR 60.4233(D)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Non-Emergency Use, and $> 25 \text{ HP} < 100 \text{ HP}$ built before 7/1/2008: Carbon monoxide $\leq 5.0 \text{ g/BHP-hr}$ (0.011 lb/HP-hr; 675 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(D)(4)]
- 170 [40 CFR 60.4233(D)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Non-Emergency Use, and $\geq 130 \text{ HP} < 500 \text{ HP}$ built before 7/1/2007 or $\geq 500 \text{ HP}$ built before 7/1/2008, or Modified/Reconstructed, Emergency Use, and $\geq 130 \text{ HP}$ built before 1/1/2009: VOC, Total $\leq 1.0 \text{ g/BHP-hr}$ (excluding formaldehyde) (0.0022 lb/HP-hr; 86 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(D)(4)]
- 171 [40 CFR 60.4233(D)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Non-Emergency Use, and $\geq 100 \text{ HP} < 130 \text{ HP}$ built on/after 7/1/08 but before 1/1/2011: Nitrogen oxides $\leq 2.0 \text{ g/BHP-hr}$ (0.0044 lb/HP-hr; 160 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(D)(4)]
- 172 [40 CFR 60.4233(D)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Non-Emergency Use, and $\geq 100 \text{ HP} < 130 \text{ HP}$ built on/after 1/1/2011: Carbon monoxide $\leq 2.0 \text{ g/BHP-hr}$ (0.0044 lb/HP-hr; 270 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(D)(4)]
- 173 [40 CFR 60.4233(D)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Non-Emergency Use, and $\geq 100 \text{ HP} < 130 \text{ HP}$ built on/after 1/1/2011: Nitrogen oxides $\leq 1.0 \text{ g/BHP-hr}$ (0.0022 lb/HP-hr; 82 ppmvd at 15% O₂). Subpart JJJ. [40 CFR 60.4233(D)(4)]
- 174 [40 CFR 60.4233(D)(4)] Which Months: All Year Statistical Basis: None specified Modified/Reconstructed, Emergency Use, and $> 25 \text{ HP} < 130 \text{ HP}$: Hydrocarbons and Nitrogen oxides $\leq 10 \text{ g/BHP-hr}$ (0.022 lb/HP-hr).
- 175 [40 CFR 60.4234] Subpart JJJ. Operate and maintain stationary SI ICE to achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine.
- 176 [40 CFR 60.4237] Emergency Use, and $< 130 \text{ HP}$ built on/after 7/1/2008 or $\geq 130 \text{ HP} < 500 \text{ HP}$ built on/after 1/1/2011 or $\geq 500 \text{ HP}$ built on/after 7/1/2010: Operating time monitored by hour/time monitor continuously during operation, if the engine does not meet the standards applicable to non-emergency engines. Install a non-resettable hour meter upon startup of engine. Subpart JJJ.
- Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS**AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities****Activity Number: PER20080001****Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial*****Group: PCS 0005 Natural Gas Internal Combustion Engines*****EQT_0015 - Natural Gas ICEs - Engines Subject to NSPS JJJ**

- 177 [40 CFR 60.4243(a)(2)] Certified, but Operated as Non-Certified, All Uses, and ≥ 100 HP: Conduct an initial performance test within 1 year of engine startup to demonstrate compliance, if the engine is not certified or the engine and control device are not operated and maintained according to the manufacturer's emission-related written instructions. Conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance, if the engine is greater than 500 HP. Subpart JJJ. [40 CFR 60.4243(a)(2)]
- 178 [40 CFR 60.4243(a)(2)] Certified, but Operated as Non-Certified, All Uses, and All HPs: Ensure that the engine is maintained and operated to the extent practicable in a manner consistent with good air pollution control practice for minimizing emissions, if the engine is not certified or the engine and control device are not operated and maintained according to the manufacturer's emission-related written instructions (i.e., not certified). Subpart JJJ. [40 CFR 60.4243(a)(2)]
- 179 [40 CFR 60.4243(a)] Certified, All Uses: Ensure engine is certified to the emission standards in 40 CFR 60.4231(a)-(c), as applicable, for the same engine class and maximum engine power. If the engine settings are adjusted, adjust according to and consistent with the manufacturer's instructions. Subpart JJJ. [40 CFR 60.4243(a)]
- 180 [40 CFR 60.4243(a)] Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conducted maintenance to demonstrate compliance. If the engine and control device are not operated and maintained according to the manufacturer's emission-related written instructions (i.e., non certified), also keep a maintenance plan. Subpart JJJ. [40 CFR 60.4243(a)]
- 181 [40 CFR 60.4243(b)(1)] Certified, All Uses, and ≥ 25 HP (Option 1): Ensure engine is certified according to procedures specified in 40 CFR 60 Subpart JJJ, for the same model year. Demonstrate compliance according to one of the methods specified in 40 CFR 60.4243(a). Subpart JJJ. [40 CFR 60.4243(b)(1)]
- 182 [40 CFR 60.4243(b)(2)ii] Non-Certified, All Uses, and ≥ 25 H ≤ 500 HP (Option 2): Demonstrate compliance with the emission standards specified in 40 CFR 60.4233(d) or (e) according to the requirements specified in 40 CFR 60.4244, as applicable. Ensure that the engine is maintained and operated to the extent practicable in a manner consistent with good air pollution control practice for minimizing emissions. In addition, conduct an initial performance test to demonstrate compliance. Subpart JJJ. [40 CFR 60.4243(b)(2)ii]
- 183 [40 CFR 60.4243(b)(2)iii] Non-Certified, All Uses, and > 500 HP (Option 2): Demonstrate compliance with the emission standards specified in 40 CFR 60.4233(d) or (e) according to the requirements specified in 40 CFR 60.4244, as applicable. Conduct an initial performance test. Conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. Subpart JJJ. [40 CFR 60.4243(b)(2)iii]
- 184 [40 CFR 60.4243(c)] Modified/Reconstructed, All Uses, > 25 HP: Demonstrate compliance with 40 CFR 60.4233(f) according to 40 CFR 60.4243(b)(2)(i) or (b)(2)(ii), except that for a non-certified engine complying according to 40 CFR 60.4243(b)(2)(i), demonstrate that the engine complies with the emission standards specified in 40 CFR 60.4233(f). Subpart JJJ. [40 CFR 60.4243(c)]
- 185 [40 CFR 60.4243(d)] Emergency Use, All HPs: Operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Limit maintenance checks and readiness testing to 100 hours per year. Operate up to 50 hours per year in non-emergency situations, but count those 50 hours towards the 100 hours per year provided for maintenance and testing. Do not use the 50 hours per year for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Do not operate for any reason other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in 40 CFR 60.4243(d). Subpart JJJ. [40 CFR 60.4243(d)]

SPECIFIC REQUIREMENTS**All ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities****Activity Number: PER20080001****Permit Number: Minor Source Oil & Gas General Master Permit**
Air - Minor Source/Small Source Initial**Group: PCS 0005 Natural Gas Internal Combustion Engines****EQT 0015 - Natural Gas ICEs - Engines Subject to NSPS JJJ**

- 186 [40 CFR 60.4243(e)] Operate using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations. Keep records of such use. If propane is used for more than 100 hours per year and the engine is not certified to the emission standards when using propane, conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. Subpart JJJ. [40 CFR 60.4243(e)]
- 187 [40 CFR 60.4243(f)] All Uses and $> 25 \text{ HP} \leq 500 \text{ HP}$: Perform initial performance testing as indicated in 40 CFR 60.4243, if the engine is either non-certified or is not operated or maintained, along with the control device, according to the manufacturer's written emission-related instructions. Conduct subsequent performance testing, if the engine is rebuilt or undergoes major repair or maintenance. Subpart JJJ. [40 CFR 60.4243(f)]
- 188 [40 CFR 60.4243(g)] Air-to-fuel ratio controller: Maintain and operate appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. Subpart JJJ. [40 CFR 60.4243(g)]
- 189 [40 CFR 60.4244] Engines Subject to Performance Testing: Conduct performance tests by following the procedures in 40 CFR 60.4244(a) through (g). Subpart JJJ.
- 190 [40 CFR 60.4245(a)] Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep records of the information in 40 CFR 60.4245(a)(1) through (a)(4). Subpart JJJ. [40 CFR 60.4245(a)]
- 191 [40 CFR 60.4245(b)] Emergency Use, and $> 25 \text{ Hp} < 130 \text{ HP}$ built on/after 7/1/2008 or $\geq 500 \text{ HP}$ built on/after 7/1/2011 or $\geq 500 \text{ HP}$ built on/after 7/1/2010: Operating time recordkeeping by electronic or hard copy upon occurrence of event, if the engine does not meet the standards applicable to non-emergency engines. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. Subpart JJJ. [40 CFR 60.4245(b)]
- 192 [40 CFR 60.4245(d)] Submit performance test results: Due within 60 days after each test conducted according to 40 CFR 60.4244 has been completed. Subpart JJJ. [40 CFR 60.4245(d)]

EQT 0016 - NG ICEs $\geq 500 \text{ hp}$ & Operating $> 720 \text{ Hours in Any 6-Month Period and Not Subject to NSPS JJJ or Chapter 22}$

- 193 [LAC 33:II.501.C.6] Stack gas concentration: Oxygen monitored by portable analyzer semiannually (six months after the stack test or previous semianual test, plus or minus 30 days). Maintain concentrations of O₂ in the same range as during the initial stack test. Calibrate portable analyzers before each test using a known reference gas sample. O₂ may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls.
- Which Months: All Year Statistical Basis: None specified
- Conduct a performance/emissions test: Due within 180 days after initial startup (or restart-up after modification), or within 60 days after achieving normal production rate or end of the shakedown period, whichever is earliest. The stack test's purpose is to verify potential emissions of the emissions unit. Repeat the test after each major engine overhaul. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources and Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- 194 [LAC 33:II.501.C.6]

SPECIFIC REQUIREMENTS**AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities****Activity Number: PER20080001****Permit Number: Minor Source Oil & Gas General Master Permit**
Air - Minor Source/Small Source Initial**Group: PCS 0005 Natural Gas Internal Combustion Engines****EQT 0016 - NG ICES >= 500 hp & Operating > 720 Hours in Any 6-Month Period and Not Subject to NSPS JJJ or Chapter 22**

Stack gas concentration: Nitrogen oxides monitored by portable analyzer semiannually (six months after the stack test or previous semiannual test, plus or minus 30 days). Maintain concentrations of NOx in a range that demonstrates compliance with permit limits. Calibrate portable analyzers before each test using a known reference gas sample. NOx may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls.

Which Months: All Year Statistical Basis: None specified
Stack gas concentration: Carbon monoxide monitored by portable analyzer semiannually (six months after the stack test or previous semiannual test, plus or minus 30 days). Maintain concentrations of CO in a range that demonstrates compliance with permit limits. Calibrate portable analyzers before each test using a known reference gas sample. CO may be monitored annually (twelve months after the stack test or previous annual test, plus or minus 30 days) if the ICE is equipped with catalytic controls.

Which Months: All Year Statistical Basis: None specified
Submit notification: Due at least 30 days prior to any LDEQ required performance/emissions test to the Office of Environmental Assessment, to provide the opportunity to conduct a pretest meeting and observe the emission testing.

195 [LAC 33:III.501.C.6] Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment.

196 [LAC 33:III.501.C.6] The test results summary shall include any necessary conversion into the units of any applicable standard (e.g., lb/hr, g/hp-hr). Equipment/operational data recordkeeping by electronic or hard copy semiannually (annually if the ICE is equipped with catalytic controls). Recorded parameters are NOx, CO, and O₂ concentrations in the stack gas obtained during semiannual (or annual) testing.

EQT 0019 - All Natural Gas ICES

200 [40 CFR 63.6590(c)] An affected source that is a new or reconstructed stationary RICE located at an area source must meet the requirements of 40 CFR 63 by meeting the requirements 40 CFR Subpart JJJ. No further requirements apply for such engines under 40 CFR 63. Subpart ZZZZ. [40 CFR 63.6590(c)]

201 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
Which Months: All Year Statistical Basis: None specified
Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

202 [LAC 33:III.1311.C] Which Months: All Year Statistical Basis: Six-minute average

Group: PCS 0008 Storage Vessels and Flash Gas Emissions

Group Members: EQT 0022 RLP 0001

EQT 0022 - Storage Vessels

SPECIFIC REQUIREMENTS

AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities
Activity Number: PER20080001

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial

Group: PCS 0008 Storage Vessels and Flash Gas Emissions**EQT 0022 - Storage Vessels**

- 203 [LAC 33:III.2103.A] Any stationary tank, reservoir, or other container of more than 250 gallons and up to 40,000 gallons nominal capacity shall not store any volatile organic compound having a maximum true vapor pressure of 1.5 psia or greater at storage conditions unless such tank, reservoir, or other container is designed and equipped with a submerged fill pipe or a vapor loss control system as defined in LAC 33:III.2103.E or is a pressure tank capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

Maintain records to verify compliance with or exemption from LAC 33:III.2103. Maintain records for at least five years.

RLP 0001 - Flash Gas Emissions Subject to LAC 33:III.2104

- Potential to emit \geq 250 tpy of flash gas: Reduce aggregated facility flash gas emissions by a minimum of 95 percent.
Facilities located in Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge Parish (potential to emit $<$ 250 tpy of flash gas):
Reduce aggregated facility flash gas emissions by a minimum of 95 percent or to a potential to emit of less than 25 tpy without artificially restricting production, hours of operation, capacity utilization, or similar parameter.
Facilities located in Calcasieu Parish (potential to emit $<$ 250 tpy of flash gas): Reduce aggregated facility flash gas emissions by a minimum of 95 percent or to a potential to emit of less than 50 tpy without artificially restricting production, hours of operation, capacity utilization, or similar parameter.
Facilities located in other parishes (potential to emit $<$ 250 tpy of flash gas): Reduce aggregated facility flash gas emissions by a minimum of 95 percent or to a potential to emit of less than 100 tpy without artificially restricting production, hours of operation, capacity utilization, or similar parameter.
Facilities to which LAC 33:III.2104 is applicable: Install a vapor recovery system that directs vapors to a fuel gas system, a sales gas system, an underground gas injection system, or a control device.
Maintain records to verify compliance with or exemption from LAC 33:III.2104 including, but not limited to, those described in LAC 33:III.2104.G.1-5. Keep records on the premises, or at an alternate location approved by DEQ, for at least five years.
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UNF 0001 - Entire Facility

- 211 [LAC 33:III.1103] Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.
Outdoor burning of waste material or other combustible material is prohibited.
Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.

SPECIFIC REQUIREMENTS**AI ID: 158873 - Minor Source Air General Permit for Crude Oil and Natural Gas Production Facilities****Activity Number: PER20080001**

Permit Number: Minor Source Oil & Gas General Master Permit
Air - Minor Source/Small Source Initial

UNF 0001 - Entire Facility

- Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- Total volume of crude oil/condensate and natural gas processed by the facility shall be monitored and recorded each month. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.
- Facility-wide (facilities which were a major source of LAC 33:III, Chapter 51-regulated toxic air pollutants (TAP) as of December 20, 1991, but which have achieved minor source status through reduction of emissions and potential to emit): Comply with the provisions of LAC 33:III.5105.A., 3, and 4, and 5113. Pursuant to LAC 33:III.905, use and diligently maintain in proper working order control equipment installed to reduce the facility's potential to emit below the major source threshold whenever any emissions are being made which can be controlled by the facilities, even though the ambient air quality standards in affected areas are not exceeded.
- Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency. Due within 30 days after requested by the administrative authority.
- During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations.
- Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March (unless an alternate date has been established by LDEQ) for the period January 1 to December 31 of the previous year when required by Section X of this general permit. Submit emission inventory data in the format specified by the Office of Environmental Assessment. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D.